UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

27581

7590

01/24/2011

MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924 EXAMINER

ALTER, ALYSSA MARGO

ART UNIT PAPER NUMBER

3762 DATE MAILED: 01/24/2011

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/648,908	08/27/2003	Scott J. Brabec	P0009676.00/LG10126	4394	

TITLE OF INVENTION: HIGH IMPEDANCE AND LOW POLARIZATION ELECTRODE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/25/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where n

maintenance fee notifica	ttions. ENCE ADDRESS (Note: Use Bl		on of maintenance fees will be mailed to the current correspondence address correspondence address; and/or (b) indicating a separate "FEE ADDRESS" Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, may be used to the company papers. Each additional paper, such as an assignment or formal drawing, may be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, may be used for any other accompany papers.				gs of the		
	7590 01/24 J., INC. JIC PARKWAY NE S., MN 55432-9924				Certif	icate	of Mailing or Transi) Transmittal is being icient postage for firs iSSUE FEE address 1) 273-2885, on the da	nission deposited with the class mail in an elabove, or being the indicated below	e United envelope facsimile v.
								(Deposit	tor's name)
								((Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	TOR	Α	TTOI	RNEY DOCKET NO.	CONFIRMATION	l NO.
10/648,908 TITLE OF INVENTION	08/27/2003 I: HIGH IMPEDANCE A	AND LOW POLARIZAT	Scott J. Brabec			P000	9676.00/LG10126	4394	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE F	EE	TOTAL FEE(S) DUE	DATE DU	E
nonprovisional	NO	\$1510	\$300		\$0	\$1810		04/25/2011	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS						
ALTER, ALY	SSA MARGO	3762	607-122000	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Uni	nge of Correspondence Indication form and. Use of a Customer A TO BE PRINTED ON	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. ON THE PATENT (print or type) nee data will appear on the patent. If an assignee is identified below, the document has been filed for					filed for		
	iate assignee category or	4 permitted)	b. Payment of Fee(s): (A check is enclose Payment by credit	Pleased.	Individual	prev	on or other private gro iously paid issue fee s ched. equired fee(s), any del	hown above)	any
NOTE: The Issue Fee an	ns SMALL ENTITY statu	us. See 37 CFR 1.27.	ed from anyone other th		-		TTY status. See 37 CF		r party in
·	records of the United Sta				Date				
Typed or printed name					Registration No.				-
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but /irginia 22313-1450. DC	FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain 1.14. This collection is y depending upon the i ne Chief Information O COMPLETED FORM	or restindiving	etain a benefit by the imated to take 12 min idual case. Any com r, U.S. Patent and Tr D THIS ADDRESS. S	publi nutes ments adem SENI	ic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa O TO: Commissioner f	by the USPTO to g gathering, prepa ne you require to rtment of Comme or Patents, P.O. B	process) ring, and complete rce, P.O. ox 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/648,908	08/27/2003	Scott J. Brabec	P0009676.00/LG10126	4394		
27581 7590 01/24/2011			EXAMINER			
MEDTRONIC, I	NC.		ALTER, ALYSSA MARGO			
710 MEDTRONIC		ART UNIT	PAPER NUMBER			
MINNEAPOLIS, I	MN 55432-9924		3762			
		DATE MAILED: 01/24/2011				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 340 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 340 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/648,908	BRABEC ET AL.				
Notice of Allowability	Examiner	Art Unit				
	Alyssa M. Alter	3762				
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT I of the Office or upon petition by the applicant. See 37 CFR 1.31	pears on the cover sheet was (OR REMAINS) CLOSED of or other appropriate commander application is	in this application. If not included nunication will be mailed in due cours				
1. This communication is responsive to <u>19 November 2010</u> .						
2. X The allowed claim(s) is/are 1.3-5.7-10.14.15.17-22 and 3	<u>26</u> .					
 Acknowledgment is made of a claim for foreign priority of a) All b) Some* c) None of the: Certified copies of the priority documents have as a copies of the priority documents have as a copies of the certified copies of the priority documents have as a copies of the certified copies of the priority documents have as a copies of the certified copies of the priority documents have as a copies of the certified copies of the priority documents have as a copies of the certified copies of the certified copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the	ve been received. ve been received in Applicat locuments have been receiv	ion No ed in this national stage application fi				
noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be sub- INFORMAL PATENT APPLICATION (PTO-152) which gi	mitted. Note the attached Ex		E OF			
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 7/19/04 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material /Alyssa M Alter/ Examiner, Art Unit 3762	6. ☐ Interview Paper No 7. ☐ Examiner 8. ☑ Examiner 9. ☐ Other /Niketa I. Pate	Informal Patent Application Summary (PTO-413), b./Mail Date s Amendment/Comment s Statement of Reasons for Allowand	:e 			
Z.aior, rate office of ou	Supervisory P	atent Examiner, Art Unit 3/02				

Application/Control Number: 10/648,908 Page 2

Art Unit: 3762

REASONS FOR ALLOWANCE

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or reasonably suggest: an implantable medical electrical lead having a conductor coupled to an electrode for stimulating myocardial tissue via intimate contact with the tissue, wherein the electrode comprising a conductive structure having a first, interior surface defining a closed cavity within the electrode and having a second, exterior surface, wherein the first, interior surface of the conductive structure defines a first electrode surface and an insulative housing wrapping around the second, exterior surface of the conductive structure and having a port that circumscribes an area of the second, exterior surface of the conductive structure to define a second electrode surface. Additionally within the cavity is an ionically conductive fluid medium filling the cavity and being in intimate contact with the first electrode surface. Furthermore, electrical lead includes an insulated helical fixation member coupled to the insulative housing and extending distally therefrom. Finally, when a current is delivered, via the conductor, to the electrode, a first current density is generated at the first electrode surface and a second current density is generated at the second electrode surface, the first current density being smaller than the second current density and when the helical fixation member is engaged in tissue, the second electrode surface forms a high impedance and low polarization tissue-stimulating electrode, in combination with the other elements in the claims.

Application/Control Number: 10/648,908 Page 3

Art Unit: 3762

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Alter whose telephone number is (571)272-4939. The examiner can normally be reached on M-F 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Niketa Patel can be reached on (571) 272-4156. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Niketa I. Patel/ Supervisory Patent Examiner, Art Unit 3762 /Alyssa M Alter/ Examiner Art Unit 3762